

SEQUENCE LISTING

<110> LUCHE, Ralf M.
WEI, Bo

<120> DSP-14 DUAL-SPECIFICITY PHOSPHATASE

<130> 200125.422US

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<150> 60/201,322

<151> 2000-05-02

<160> 16

<170> PatentIn Ver. 2.1

<210> 1

<211> 1165

<212> DNA

<213> Homo sapiens

<400> 1

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1165

<210> 2

<211> 220
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 <213> Homo sapiens

<400> 2

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Tyr	Cys	Thr	Pro	Gly	Ala	Phe	Glu	Leu	Glu	Arg	Leu	Phe	Trp	Lys	Gly	35	40	45	
Ser	Pro	Gln	Tyr	Thr	His	Val	Asn	Glu	Val	Trp	Pro	Lys	Leu	Tyr	Ile	50	55	60	
Gly	Asp	Glu	Ala	Thr	Ala	Leu	Asp	Arg	Tyr	Arg	Leu	Gln	Lys	Ala	Gly	65	70	75	80
Phe	Thr	His	Val	Leu	Asn	Ala	Ala	His	Gly	Arg	Trp	Asn	Val	Asp	Thr	85	90	95	
Gly	Pro	Asp	Tyr	Tyr	Arg	Asp	Met	Asp	Ile	Gln	Tyr	His	Gly	Val	Glu	100	105	110	
Ala	Asp	Asp	Leu	Pro	Thr	Phe	Asp	Leu	Ser	Val	Phe	Phe	Tyr	Pro	Ala	115	120	125	
Ala	Ala	Phe	Ile	Asp	Arg	Ala	Leu	Ser	Asp	Asp	His	Ser	Lys	Ile	Leu	130	135	140	
Val	His	Cys	Val	Met	Gly	Arg	Ser	Arg	Ser	Ala	Thr	Leu	Val	Leu	Ala	145	150	155	160
Tyr	Leu	Met	Ile	His	Lys	Asp	Met	Thr	Leu	Val	Asp	Ala	Ile	Gln	Gln	165	170	175	
Val	Ala	Lys	Asn	Arg	Cys	Val	Leu	Pro	Asn	Arg	Gly	Phe	Leu	Lys	Gln	180	185	190	
Leu	Arg	Glu	Leu	Asp	Lys	Gln	Leu	Val	Gln	Gln	Arg	Arg	Arg	Ser	Gln	195	200	205	
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FOR "524860"

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Peptide

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Tyr Leu Met

<210> 4
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Peptide

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Thr Asn Ile Leu Ala Tyr Leu Met
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<210> 5
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
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<400> 5
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28

<210> 6
<211> 28
<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Nucleotide
primer

<400> 6

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<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Nucleotide
primer

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<210> 8

<211> 170

<212> PRT

<213> Homo sapiens

<400> 8

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1 5 10 15

Pro Leu Ser Asn Ser Gln Pro Ser Phe Pro Val Glu Ile Leu Pro Phe
20 25 30

Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Glu
35 40 45

Glu Phe Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn
50 55 60

Leu Phe Glu Asn Ala Gly Glu Phe Lys Tyr Lys Gln Ile Pro Ile Ser
65 70 75 80

Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser
85 90 95

Phe Ile Asp Glu Ala Arg Gly Lys Asn Cys Gly Val Leu Val His Cys

100	105	110
Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met		
115	120	125
Gln Lys Leu Asn Leu Ser Met Asn Asp Ala Tyr Asp Ile Val Lys Met		
130	135	140
Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu		
145	150	155
		160
Asp Phe Glu Arg Thr Leu Gly Leu Ser Ser		
165	170	
<210> 9		
<211> 168		
<212> PRT		
<213> Homo sapiens		
<400> 9		
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1	5	10
		15
Pro Ser Ser Gln Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr		
20	25	30
Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr		
35	40	45
Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe		
50	55	60
Glu His Gly Gly Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His		
65	70	75
		80
Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile		
85	90	95
Asp Glu Ala Arg Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala		
100	105	110
Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys		
115	120	125
Met Asn Leu Ser Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys		
130	135	140

Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe
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Glu Arg Thr Leu Gly Leu Ser Ser
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<210> 10
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 10
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 1 5 10 15

Ile Leu Pro Asn Leu Tyr Leu Gly Ser Ala Arg Asp Ser Ala Asn Leu
 20 25 30

Glu Ser Leu Ala Lys Leu Gly Ile Arg Tyr Ile Leu Asn Val Thr Pro
 35 40 45

Asn Leu Pro Asn Phe Phe Glu Lys Asn Gly Asp Phe His Tyr Lys Gln
 50 55 60

Ile Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Arg Phe Phe Pro
 65 70 75 80

Glu Ala Ile Glu Phe Ile Asp Glu Ala Leu Ser Gln Asn Cys Gly Val
 85 90 95

Leu Val His Cys Leu Ala Gly Val Ser Arg Ser Val Thr Val Thr Val
 100 105 110

Ala Tyr Leu Met Gln Lys Leu His Leu Ser Leu Asn Asp Ala Tyr Asp
 115 120 125

Leu Val Lys Arg Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met
 130 135 140

Gly Gln Leu Leu Asp Phe Glu Arg Ser Leu Arg Leu Glu
 145 150 155

<210> 11
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 <212> PRT
 <213> Homo sapiens

<400> 11

Gly Leu Cys Glu Gly Lys Pro Ala Ala Leu Leu Pro Met Ser Leu Ser
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20 25 30

His Leu Tyr Leu Gly Ser Gln Lys Asp Val Leu Asn Lys Asp Leu Met
35 40 45

Thr Gln Asn Gly Ile Ser Tyr Val Leu Asn Ala Ser Asn Ser Cys Pro
50 55 60

Lys Pro Asp Phe Ile Cys Glu Ser Arg Phe Met Arg Val Pro Ile Asn
65 70 75 80

Asp Asn Tyr Cys Glu Lys Leu Leu Pro Trp Leu Asp Lys Ser Ile Glu
85 90 95

Phe Ile Asp Lys Ala Lys Leu Ser Ser Cys Gln Val Ile Val His Cys
100 105 110

Leu Ala Gly Ile Ser Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met
115 120 125

Lys Thr Met Gly Met Ser Ser Asp Asp Ala Tyr Arg Phe Val Lys Asp
130 135 140

Arg Arg Pro Ser Ile Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu
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Glu Tyr Glu Arg Thr Leu Lys Leu Leu Ala
165 170

<210> 12

<211> 168

<212> PRT

<213> Homo sapiens

<400> 12

Pro Ala Gln Ala Leu Pro Pro Ala Gly Ala Glu Asn Ser Asn Ser Asp
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20 25 30

Tyr Leu Tyr Leu Gly Ser Cys Asn His Ser Ser Asp Leu Gln Gly Leu
 35 40 45

Gln Ala Cys Gly Ile Thr Ala Val Leu Asn Val Ser Ala Ser Cys Pro
 50 55 60

Asn His Phe Glu Gly Leu Phe His Tyr Lys Ser Ile Pro Val Glu Asp
 65 70 75 80

Asn Gln Met Val Glu Ile Ser Ala Trp Phe Gln Glu Ala Ile Ser Phe
 85 90 95

Ile Asp Ser Val Lys Asn Ser Gly Gly Arg Val Leu Val His Cys Gln
 100 105 110

Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Ile Gln
 115 120 125

Ser His Arg Val Arg Leu Asp Glu Ala Phe Asp Phe Val Lys Gln Arg
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Arg Gly Val Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln
 145 150 155 160

Leu Glu Thr Gln Val Leu Cys His
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<210> 13

<211> 169

<212> PRT

<213> Homo sapiens

<400> 13

Pro Leu Ser Thr Ser Val Pro Asp Ser Ala Glu Ser Gly Cys Ser Ser
 1 5 10 15

Cys Ser Thr Pro Leu Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
 20 25 30

Phe Leu Tyr Leu Gly Ser Ala Tyr His Ala Ser Arg Lys Asp Met Leu
 35 40 45

Asp Ala Leu Gly Ile Thr Ala Leu Ile Asn Val Ser Ala Asn Cys Pro
 50 55 60

Asn His Phe Glu Gly His Tyr Gln Tyr Lys Ser Ile Pro Val Glu Asp
 65 70 75 80

Asn His Lys Ala Asp Ile Ser Ser Trp Phe Asn Glu Ala Ile Asp Phe
 85 90 95
 Ile Asp Ser Ile Lys Asn Ala Gly Gly Arg Val Phe Val His Cys Gln
 100 105 110
 Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Met Arg
 115 120 125
 Thr Asn Arg Val Lys Leu Asp Glu Ala Phe Glu Phe Val Lys Gln Arg
 130 135 140
 Arg Ser Ile Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln
 145 150 155 160
 Phe Glu Ser Gln Val Leu Ala Pro His
 165

<210> 14

<211> 169

<212> PRT

<213> Homo sapiens

<400> 14

Pro Val Pro Pro Ser Ala Thr Glu Pro Leu Asp Leu Gly Cys Ser Ser
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Cys Gly Thr Pro Leu His Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
 20 25 30

Phe Leu Tyr Leu Gly Ser Ala Tyr His Ala Ala Arg Arg Asp Met Leu
 35 40 45

Asp Ala Leu Gly Ile Thr Ala Leu Leu Asn Val Ser Ser Asp Cys Pro
 50 55 60

Asn His Phe Glu Gly His Tyr Gln Tyr Lys Cys Ile Pro Val Glu Asp
 65 70 75 80

Asn His Lys Ala Asp Ile Ser Ser Trp Phe Met Glu Ala Ile Glu Tyr
 85 90 95

Ile Asp Ala Val Lys Asp Cys Arg Gly Arg Val Leu Val His Cys Gln
 100 105 110

Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Met Met

115	120	125
Lys Lys Arg Val Arg Leu Glu Glu Ala Phe Glu Phe Val Lys Gln Arg		
130	135	140
Arg Ser Ile Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln		
145	150	155
		160
Phe Glu Ser Gln Val Leu Ala Thr Ser		
165		
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<400> 15		
Ser Glu Arg Ala Leu Ile Ser Gln Cys Gly Lys Pro Val Val Asn Val		
1	5	10
		15
Ser Tyr Arg Pro Ala Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro		
20	25	30
Phe Leu Tyr Leu Gly Ser Ala Tyr His Ala Ser Lys Cys Glu Phe Leu		
35	40	45
Ala Asn Leu His Ile Thr Ala Leu Leu Asn Val Ser Arg Arg Thr Ser		
50	55	60
Glu Ala Cys Met Thr His Leu His Tyr Lys Trp Ile Pro Val Glu Asp		
65	70	75
		80
Ser His Thr Ala Asp Ile Ser Ser His Phe Gln Glu Ala Ile Asp Phe		
85	90	95
Ile Asp Cys Val Arg Glu Lys Gly Gly Lys Val Leu Val His Cys Glu		
100	105	110
Ala Gly Ile Ser Arg Ser Pro Thr Ile Cys Met Ala Tyr Leu Met Lys		
115	120	125
Thr Lys Gln Phe Arg Leu Lys Glu Ala Phe Asp Tyr Ile Lys Gln Arg		
130	135	140
Arg Ser Met Val Ser Pro Asn Phe Gly Phe Met Gly Gln Leu Leu Gln		
145	150	155
		160

Tyr Glu Ser Glu Ile Leu Pro Ser Thr Pro Asn
165 170

<210> 16
<211> 180
<212> PRT
<213> Homo sapiens

<400> 16
Ser Gly Ser Phe Glu Leu Ser Val Gln Asp Leu Asn Asp Leu Leu Ser
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Asp Gly Ser Gly Cys Tyr Ser Leu Pro Ser Gln Pro Cys Asn Glu Val
20 25 30

Thr Pro Arg Ile Tyr Val Gly Asn Ala Ser Val Ala Gln Asp Ile Pro
35 40 45

Lys Leu Gln Lys Leu Gly Ile Thr His Val Leu Asn Ala Ala Glu Gly
50 55 60

Arg Ser Phe Met His Val Asn Thr Asn Ala Asn Phe Tyr Lys Asp Ser
65 70 75 80

Gly Ile Thr Tyr Leu Gly Ile Lys Ala Asn Asp Thr Gln Glu Phe Asn
85 90 95

Leu Ser Ala Tyr Phe Glu Arg Ala Ala Asp Phe Ile Asp Gln Ala Leu
100 105 110

Ala Gln Lys Asn Gly Arg Val Leu Val His Cys Arg Glu Gly Tyr Ser
115 120 125

Arg Ser Pro Thr Leu Val Ile Ala Tyr Leu Met Met Arg Gln Lys Met
130 135 140

Asp Val Lys Ser Ala Leu Ser Ile Val Arg Gln Asn Arg Glu Ile Gly
145 150 155 160

Pro Asn Asp Gly Phe Leu Ala Gln Leu Cys Gln Leu Asn Asp Arg Leu
165 170 175

Ala Lys Glu Gly
180